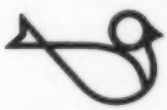


Churchill
Northern Studies Centre

Limited edition prints of the cover art are available by writing the Centre.

Chairman's Statement:

The Report of the Churchill Northern Studies Centre before you, outlines the activities of the Centre during 1984 and describes a few of the research projects and course programmes which the Centre supported with our facilities and logistical services.

The year was one of transition for the Centre as a restructuring of the Board of Directors occurred which resulted in the present complement of 17 Board members representing entities involved with and supportive of the Centre. During the year, the Province of Manitoba, through the Department of Education, provided the Centre with significant funding to enable hiring of necessary staff which will provide the catalyst for the Centre to reach its, as yet unfulfilled potential.

It should be made clear that the fundamental basis of the Centre as an independent, non-profit education and research facility with strong community support remains intact.

On behalf of the Board of Directors and staff of the Centre, I would like to express my sincere appreciation to Sigrun Martin, Hugh Jones, Lorraine Brandson, George Whitman, Bob Whitmore, Bonnie Chartier, Gavin Lawrie and in particular, Bishop O. Robidoux, as members of the previous Board of Directors, who provided tireless efforts and a persistent dedication toward the future of the Centre.

The Board is concerning itself with developing the Centre to the extent that it will become more of a thriving and viable entity thereby providing an environment of appropriate facilities and support services, to attract education programmes and research projects to Churchill.

I am pleased to announce that the Board has hired Dennis Macknak as its Executive Director, effective June 15, 1985. Mr. Macknak brings a great deal of sound developmental experience to the position which we feel is ideally suited to the present stage of the Centre's evolution. Over the coming months, Mr. Macknak, in association with the Directors will develop a sound and viable plan of operations, in order that the Centre may truly achieve its significant promise.

To the ongoing users and supporters of the Centre, I express my sincere appreciation and gratitude for your involvement in the Churchill Northern Studies Centre. If you are contemplating becoming a member or donating funds, equipment or books for the library's use, please examine what we've done and what there is left to do. To further the objectives, activities and aims of the Centre, we need your support.

John E. O'Connor,
Chairman.

Purpose:

The purpose of the Churchill Northern Studies Centre is to provide researchers, students and instructors with accommodation, logistical support and a resource base in order to facilitate research and education in Canada's north.

Objectives:

The Churchill Northern Studies Centre is an accommodation and resource base for researchers and students with special interests in the north. It is operated by a non-profit corporation that is funded by user fees, foundation and government subsidies, and private donations. The objectives of the Centre are:

1. To be a point of contact between scientists and teachers from the south and residents of the Churchill area.
2. To facilitate northern studies through both research and education.
3. To make available to northern and southern Canadians a high quality educational experience in a northern setting.
4. To coordinate the research and teaching activities in the Churchill area.

History:

With the encouragement of the Government of Manitoba and the specific assistance of the Communities Economic Development Fund, a group of local citizens formed a Community Development Corporation in the mid 1970's. In its attempts to develop projects to improve the economy of the Community, the local Development Corporation concluded that the long standing interest of scientists in the locality could be developed more cohesively if suitable facilities were available for their use.

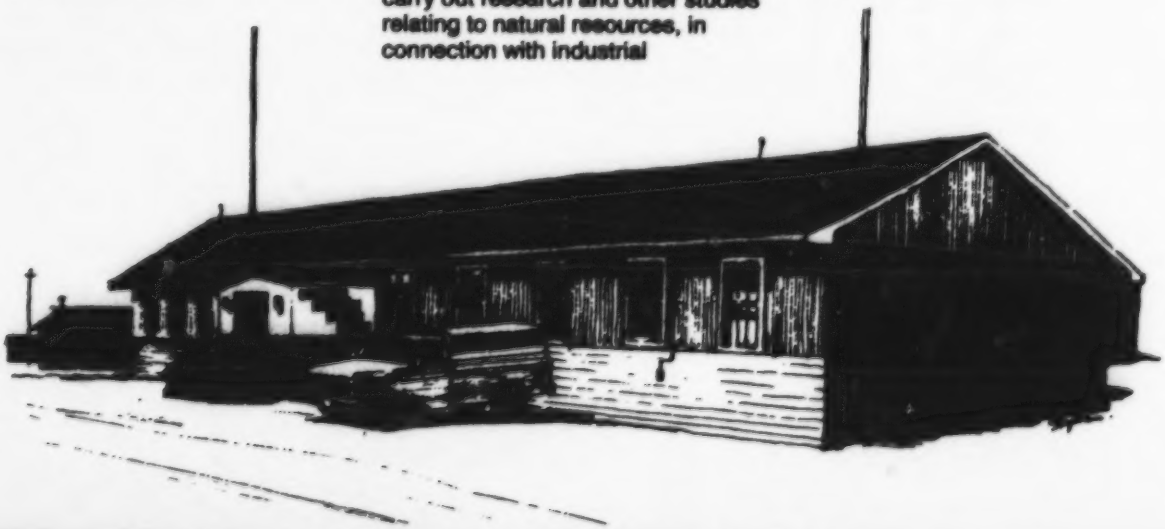
Acting as liaison between the Community of Churchill and sources of funding, the Provincial Agency (Communities Economic Development Fund) applied for and was successful in obtaining a grant from the Donner Canadian Foundation, Toronto, to provide the necessary monies to establish the Research Centre and to cover operational costs for the first years.

The Churchill Northern Studies Centre was incorporated in September, 1976 under the Laws of Manitoba as a non-profit body "to promote northern studies through the creation, maintenance, and operation of a northern research station." The Letters Patent permit wide authority to carry out research and other studies relating to natural resources, in connection with industrial development, transportation, construction, and much else; to make studies concerned with the ecological balance in northern Canada, preservation of wildlife, and the economic viability of northern communities, etc.

The Northern Studies Centre is unusual, at least in North America, in being neither a government undertaking nor an offshoot of a university. It was founded by local citizens to provide facilities for the use of scientists and local participation in its activities is assured.

Accommodation for the Centre has been provided in buildings formerly utilized by the Government of the North-West Territories; there are basic laboratory facilities, residential accommodation and lecture room facilities.

The Centre is the only station north of the treeline to offer university credit field courses to students from across Canada and abroad. The site of the Centre was chosen because of its easy accessibility from the south, its historical importance as a fur-trading and research base, its present importance as a seaport, and its obvious significance to biologists and geographers.



Activities:

To fulfill its purpose, the Centre will:

- Provide accommodation, laboratory space and transportation services for researchers, teachers and students.
- Develop and maintain educational resources in the library, herbarium and specimen collection.
- Organize and promote university credit and non-credit course programmes.
- Solicit long-term research projects and collect year-round data by contractual agreement.
- Maintain communication and supply lines to those research camps using the Centre as a staging base.
- Provide winter storage for scientific equipment and base camp supplies.
- Provide the public with information on research projects and courses in the Churchill area.
- Participate with university field stations across Canada in lobbying for government and university support.
- Raise funds for capital projects, conservation concerns, research projects and education programmes.

Priorities for the use of funds:

In the effort to raise funds and allocate them responsibly, the Centre will give priority to:

- Providing adequate accommodation and laboratory facilities and transportation services.
- Developing and advertising course programmes.
- Enhancing the Centre's library and other educational resources.
- Developing research projects with direct Centre involvement, emphasizing conservation and northern development.

Geographical Features

1. Hudson Bay
2. Button Bay
3. Churchill River
4. Bird Cove
5. Gordon Point
6. Knights Hill
7. La Pérouse Bay
8. Cape Churchill
9. Goose Creek
10. Landing Lake (Farnworth)
11. Twin Lakes
12. Norton Lake

Man-Made Features

13. Prince of Wales Fort
14. Churchill
15. Churchill Northern Studies Centre (Akudlik)
16. Airport (Fort Churchill)
17. National Research Council Rocket Launch
18. Tundra Biology Station (Queen's University)
19. CWS Observation Tower
20. Canada Goose Field Camp
21. Railway

1984 Arctic Field Courses:

University Credit Courses:

Each year, the Centre organizes a university credit course programme with a range of courses in biology, botany, resource management and geography. Students gain both valuable experience in the field and credit toward their degrees provided all arrangements are made beforehand.

Sub-Arctic Ornithology:
University of Toronto
Dr. J. Rising
Dr. T. Parson
July 2-16, 1984
Studies included a general survey of the Churchill area and habitats, bird census techniques and breeding bird surveys. As well, bird migration, adaptations of birds and mammals for living in northern areas were examined and seasonal patterns of activity were discussed.

Arctic Ecosystems:
University of Toronto
Dr. R. Jeffries
Dr. T. Carleton
July 16-27, 1984
Major vegetation types and their relationship to geomorphology and microclimate were examined and studied along with general ecology of major plant communities. Field sampling methods were also discussed.

Field Ecology:
Youngstown State University, Ohio
Dr. L. Schroeder
August 27 - September 3, 1984
Ecosystems in Churchill different from the deciduous forest of northeastern Ohio were examined.

Non-Credit Courses:

Courses lasting a few days or a few weeks give amateur naturalists and photographers the opportunity to improve their skills with the help of expert instructors.

Nature Photography
R.R. Taylor
June 15-22, 1984
June 22-29, 1984
Amateur photographers interested in the natural environment of Churchill took part in this intensive week-long workshop. The rich diversity of arctic flowers and nesting birds (often photographed from nearby blinds) provided a wealth of subject matter to test newly acquired techniques in lighting and composition.

Arctic Survival and Arctic Lifestyles
Dr. R. Riewe
March 21 - 26, 1984
Slide Lectures, discussions and outdoor projects introduced participants to winter survival techniques. Designed to reduce vulnerability in emergencies, the course also compared southern attitudes to survival with traditional northern lifestyles. Participants built snow structures called quinzhees and igloos and slept in them.

The Birds of Churchill
Rudolf Koes
June 18-25, 1984
Popular with local residents as well as visitors, this course introduced some participants to the wonders of birding and others to the rare delights of birding in Churchill.

Wildflowers of Churchill
Dr. K. Johnson
Museum of Man and Nature
July 13-18, 1984
Introduction to flowering plants of the Churchill region with field sessions, lab and slide/lectures of plant communities for identification and familiarity with use of keys and study.

Balance Sheet

As at December 31, 1984
(Unaudited)

	1984 $	1983 $
ASSETS		
CURRENT Cash in bank, note 2	7,401	12,503
Accounts receivable, note 3	86,190	3,241
Prepaid insurance	1,451	1,355
	95,042	17,099
LIABILITIES		
CURRENT Accounts payable, note 4	4,555	7,399
Unappropriated grants, note 5	89,404	9,404
	93,959	16,803
UNAPPROPRIATED SURPLUS		
BALANCE, END OF YEAR	1,083	296
	95,042	17,099

Approved on behalf of the Board:

Director

Director

Accountants' Comments

We have prepared the accompanying balance sheet as at December 31, 1984 and the statement of financial activities for the year then ended from the records of Churchill Research Centre Inc. and from other information supplied to us by the company. In order to prepare these financial statements we made a review consisting primarily of enquiry, comparison and discussion of such information. However, in accordance with the terms of our engagement, we have not performed an audit and consequently do not express an opinion on these financial statements.

CHARTERED ACCOUNTANTS
Winnipeg, Manitoba
February 21, 1985

Statement of Financial Activities

For the year ended December 31, 1984
(Unaudited)

	1984	1983
	$	$
Revenues Courses	18,604	8,279
Accommodations	22,409	38,090
Vehicle rentals	182	1,344
Interest	—	4,434
Research	6,134	10,007
Sundry	688	922
	48,017	**63,076**
Outside support, note 6		
— Grants and donations	30,103	82,712
— Membership	1,296	1,361
	31,399	**84,073**
Total Revenues	79,416	147,149
Total Expenditures	78,629	164,088
Net Operating Surplus (Deficit) for the year	787	(16,939)
Unappropriated Surplus, beginning of year	296	17,235
Unappropriated Surplus, end of year	1,083	296

Schedule of Expenditures

For the year ended December 31, 1984
(Unaudited)

	1984 $	1983 $
Advertising and promotion	111	4,058
Bad debts	—	1,189
Courses	7,173	4,799
C.N.S.C. Projects — Research	—	36,133
— Ross Gull	—	12,338
Career start	4,752	5,851
Delivery	877	1,588
Directors expense	4,809	4,402
Executive director — fees	—	23,750
— expenses	—	3,723
Food	9,096	15,509
Insurance	3,007	2,555
Interest and bank charges	449	150
Legal and accounting	2,928	4,570
Library	135	576
Management salaries and benefits	10,750	—
Miscellaneous	344	1,038
Office	864	1,512
Property taxes	—	(6,978)
Rentals	105	413
Repairs and maintenance	3,306	7,297
Sub contract	130	612
Supplies	996	1,128
Telephone	1,585	1,813
Utilities	22,528	26,343
Vehicles	1,959	4,276
Vertical axis wind turbine	1,737	2,332
Workers' compensation	71	305
Equipment purchased	897	3,406
Vehicles purchased	—	1,400
	78,829	164,088

Notes to Financial Statements

December 31, 1984
(Unaudited)

1. **Significant Accounting Policies**
   (a) The company is a non-profit organization incorporated under the laws of Manitoba
   (b) **Fixed Assets**
   The acquisition of fixed assets are being recorded directly as expenditures.
   (c) **Government Grants**
   The government grants and related expenditures are being recorded in the periods to which they pertain.

	1984 $	1983 $
2. **Cash** Royal Bank of Canada — current	6,599	11,791
Bank of Montreal — current	702	712
Cash on hand	100	—
	7,401	12,503
3. **Accounts Receivable** Trade	2,273	4,374
Less: allowance for doubtful accounts	1,083	1,189
	1,190	3,185
Grant receivable — C.E.D.F.	85,000	—
Payroll deductions	—	56
	86,190	3,241
4. **Accounts Payable** Trade	4,555	5,538
Grant repayable	—	1,861
	4,555	7,399

The Churchill town council has waived the 1983 taxes and has exempted the Research Centre from the 1984 school taxes. A decision on the appeal for the 1982 taxes was made in December 1983 and subsequently waived.

5. **Unappropriated Grants**	$
The unappropriated grants pertain to:	
1) the balance of the grant remaining to pay for Executive Director's fees and expenses	9,404
2) the operating and staffing of the Centre to the end of the summer of 1985	80,000
	89,404

	1984 $	1983 $
6. **Outside Support**		
The company has received outside support in the form of grants and donations as follows:		
Grants		
Government of Manitoba — Career start	4,752	4,213
— Executive Director	—	27,473
— Operations	25,000	—
Government of Canada — Research projects	—	32,154
— Ross Gull	—	17,000
	29,752	80,840
Donations	351	1,872
	30,103	82,712

1984 Research Projects:

The Centre provides accommodation, laboratory space and transportation services for researchers in the Churchill area. We maintain a library with about 4,000 volumes and a herbarium with a growing collection of plant specimens. We also monitor our base radio for regular and emergency calls from nearby research camps, who also use our facilities for storing scientific equipment and base camp supplies in winter.

In addition to the reasonable fees they pay for these services, researchers are asked to contribute brief preliminary reports and copies of any published articles on their work in the area, as well as information necessary for our annual report. And their home universities often contribute to our annual fundraising appeal, sometimes quite generously.

Research projects which have continued utilizing the Centre's facilities and services during past field seasons include **Climate of the Hudson Bay Lowlands,** McMaster University, **Reproductive Biology and Ecology of Female Polar Bears in the Churchill Denning Area,** University of Alberta and C.W.S., **Ross' Gull Monitoring,** World Wildlife Fund and Queen's University.

Other projects in 1984 included **Vegetation Studies — Algae of the Churchill River Estuary,** University of Manitoba and **Progression of Arctic Tern Nesting Season,** Dalhousie University.

The Centre continues to provide basic logistical support services for a number of field camps in the Churchill area. Researchers working on Snow Geese at La Perouse Bay and Canada Geese and Polar Bears on Cape Churchill take advantage of the following services the Centre offers:

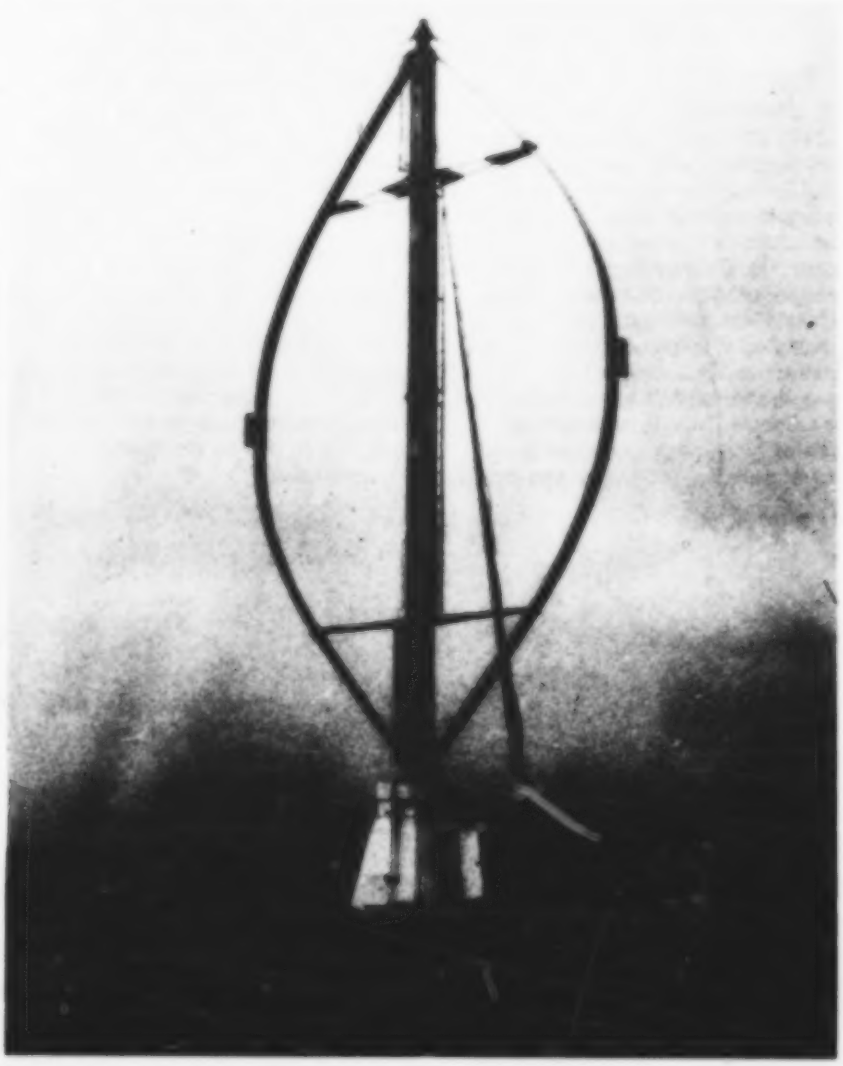
1) Accommodation and local transportation for researchers enroute to their field camps.
2) Daily radio contact with the camps and telephone liaison with project organizers.
3) Middleman services for the shipment of food and equipment.
4) Lab facilities.
5) Off-season storage facilities.
6) Emergency services as required.

Independent Courses and Groups:

The Centre provides accommodation and support services to university courses and study tours arranged outside our regular course programme. Other groups interested in visiting Churchill for educational purposes are eligible for the same services, though all requests for accommodation are carefully screened to prevent competition with Churchill's growing hospitality trade.

Contract Research:

The Centre solicits contract work for year-round data collection, allowing researchers to maintain a full series of data in spite of their obligations to either universities, government departments or businesses far from Churchill.



Vertical Axis Wind Turbine:

The Churchill Northern Studies Centre in co-operation with the National Research Council and Manitoba Hydro is entering the third year of monitoring and evaluating the performance of the two-bladed, 17 metre high 50 kw Vertical Axis Wind Turbine.

The VAWT was erected to determine:

(a) the energy production of the VAWT in the local wind regime, (b) the behavior of the VAWT under local conditions such as wind variations and icing, (c) the nature and extent of maintenance requirements, (d) the economy of operation by comparison with other local electric generating units, (e) the nature of any special problems involved in linking the VAWT to the local electrical system with respect to stability, voltage and current fluctuations.

Facilities:

Food & Lodging

The Centre accommodates up to 56 people in five separate buildings. Twenty beds are available in the main building in any season, with 12 more available in an adjacent dormitory only in summer. The remaining 24 beds in three cabins are often booked well in advance by researchers on long-term projects. A cook prepares meals for a set rate during the summer months of June, July and August.

Showers can be found in most of the residential buildings and coin-operated laundry facilities are also available.

Library & Herbarium

The library at the Centre is primarily the work of Nora Murchison, a specialist in northern library collections. Her acquisition in 1977 of about 4,000 volumes focuses on text books, reports, journals and vertical file materials dealing with northern issues and research. We are particularly anxious to develop our access to a wide range of relevant northern reference books and current journals and to maintain a comprehensive collection of reports and theses written by researchers who have been resident at the Centre. The herbarium contains representative samples of most of the plants of the area, with visiting botanists extending the collection every year. We also have an insect collection, and we hope to expand our specimen collections to include study skins of birds and small mammals. All of these collections can be used for comparative identification in research as well as for university credit and non-credit courses in botany, zoology and ornithology.

Laboratories

Three spacious research labs and one teaching laboratory have been constructed in the former community hall, now named Beckett Hall. A small collection of basic laboratory supplies such as dissecting microscopes, balances and drying ovens has been developed for use by researchers.

Seminar Rooms

A large seminar room is used for meetings and classes in the main building. Other more intimate meeting rooms are available in the cabins.

Transportation

An airport transfer service is provided by the Centre, though local bus and taxi service is also available. Our pickup truck can be rented for a maximum of four hours. Vehicles can be rented from a number of local agencies. Charter flights by fixed-wing aircraft can be booked locally, while helicopter flights, normally chartered in the south, can sometimes be arranged in cooperation with other researchers at the Centre. Trips to remote field camps by all-terrain vehicles or by hovercraft can all be arranged locally.

Storage

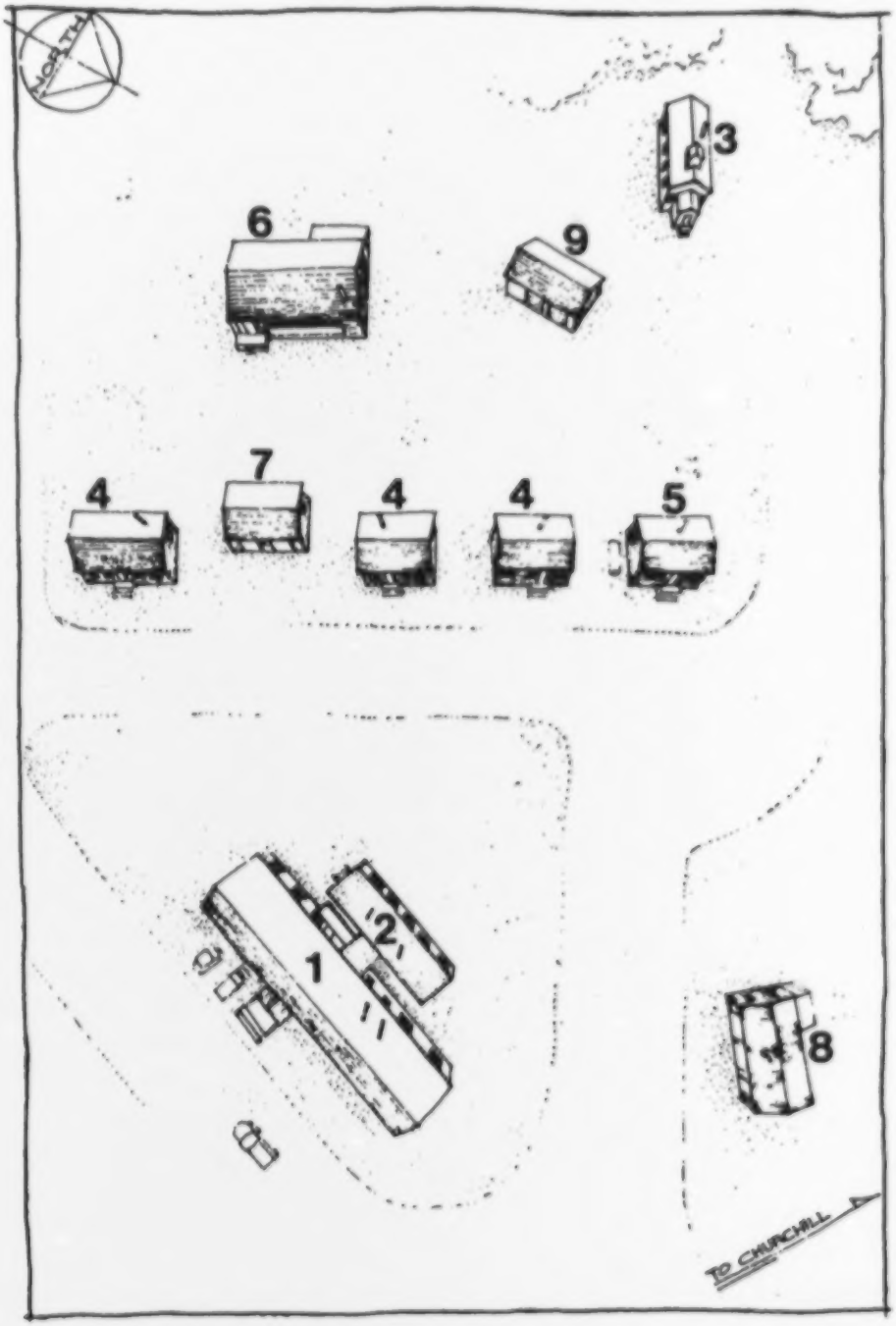
Secure storage facilities are essential at a research station, especially for researchers trying to save on shipping costs at both ends of each field season. Therefore, refrigerators and freezers are available for temporary cold storage in summer, and other facilities are available for cold and warm storage in winter. In addition, two three-bay garages provide ample space for storing field gear, including tundra tricycles and banding nests. Secure storage is also available for personal valuables that researchers do not wish to carry in the field; plane and train tickets left in our safe make it easy for us to change travel bookings for researchers who need to change their plans while working at remote field camps.

Communication

Regular telephone service is available at the Centre, of course, and we also maintain a base radio for daily communication with a number of field camps in the area. We handle regular requests for the shipment of food and supplies as well as emergency calls for assistance.

Campus of the Churchill Northern Studies Centre 1984

1. Main Building
2. Dormitory Annex
3. Dormitory
4. Residential Cabins
5. Staff House
6. Beckett Hall — Laboratory
7. Garage
8. Garage
9. Department of Natural Resources Building



How Can You Help?

You can help students and researchers in the North:

***By contributing personally to our facilities or programme development work:**

Benefactor	$1,000
Sponsor	500
Associate	100
Sustaining	50
Supporting	25

***By encouraging your company to become a corporate supporter:**

With our corporate fundraising campaign in its infancy, your company could gain a high profile by helping to introduce Canadian and international students to the challenges of arctic and subarctic research.

***By donating professional services or becoming a volunteer:**

Volunteers help us in the office, in the library and with specific projects. In addition, our clients are often our most eager volunteers.

***By becoming an associate member of the Centre:**

1984 membership rates:

Student	$ 5.00
Regular	7.00
Contributing	25.00
Lifetime	100.00

***By advertising our Arctic Field Courses and encouraging your friends or students to enroll:**

Advertise our courses on your company bulletin board or hang our poster in your classroom. Tell your friends about us.

Registered Canadian Charity No. 0471920-59-21

Board of Directors
(until December 4, 1984)

Bishop O. Robidoux, Chairman
Mr. Hugh Jones, Vice-Chairman
Dr. Michael Blanar
Miss Lorraine Brandson
Mrs. Bonnie Chartier
Dr. John Clake
Dr. Terry Hogan
Mr. Gavin Lawrie
Mrs. Sigrun Martin
Mr. George Whitman
Mr. Robert Whitmore

Board of Directors
(after December 4, 1984)

Mr. John O'Connor, Chairman — Churchill Community Development Corporation
Dr. Donald Unruh, Vice-Chairman — Department of Education
Dr. Michael Blanar — Brandon University
Dr. John Clake — University of Winnipeg
Mr. Robert DeMeulles — Churchill resident — member at large
Mr. Don Figurski — Churchill resident — member at large
Mr. Merv Gunter — Churchill resident — member at large
Dr. Terry Hogan — University of Manitoba
Mr. Mark Ingerbrigtson — Local Government District of Churchill
Dr. Walter Kupsch — Scientific Advisory Board of the Northwest Territories
Mrs. Bernice O'Connor — Communities Economic Development Fund
Mr. Robert Penwarden — Churchill Chamber of Commerce
Dr. J. Kenneth Pulfer — National Research Council of Canada
Mr. Keith Rawlings — Churchill Port Authority
Dr. Roderick Riewe — Association of Canadian Universities for Northern Studies
Mr. Dale F. Stewart — Department of Natural Resources
Dr. Marion Vaisey-Genser — Manitoba Research Council

Mr. Greg Goodwin, Secretary/Treasurer

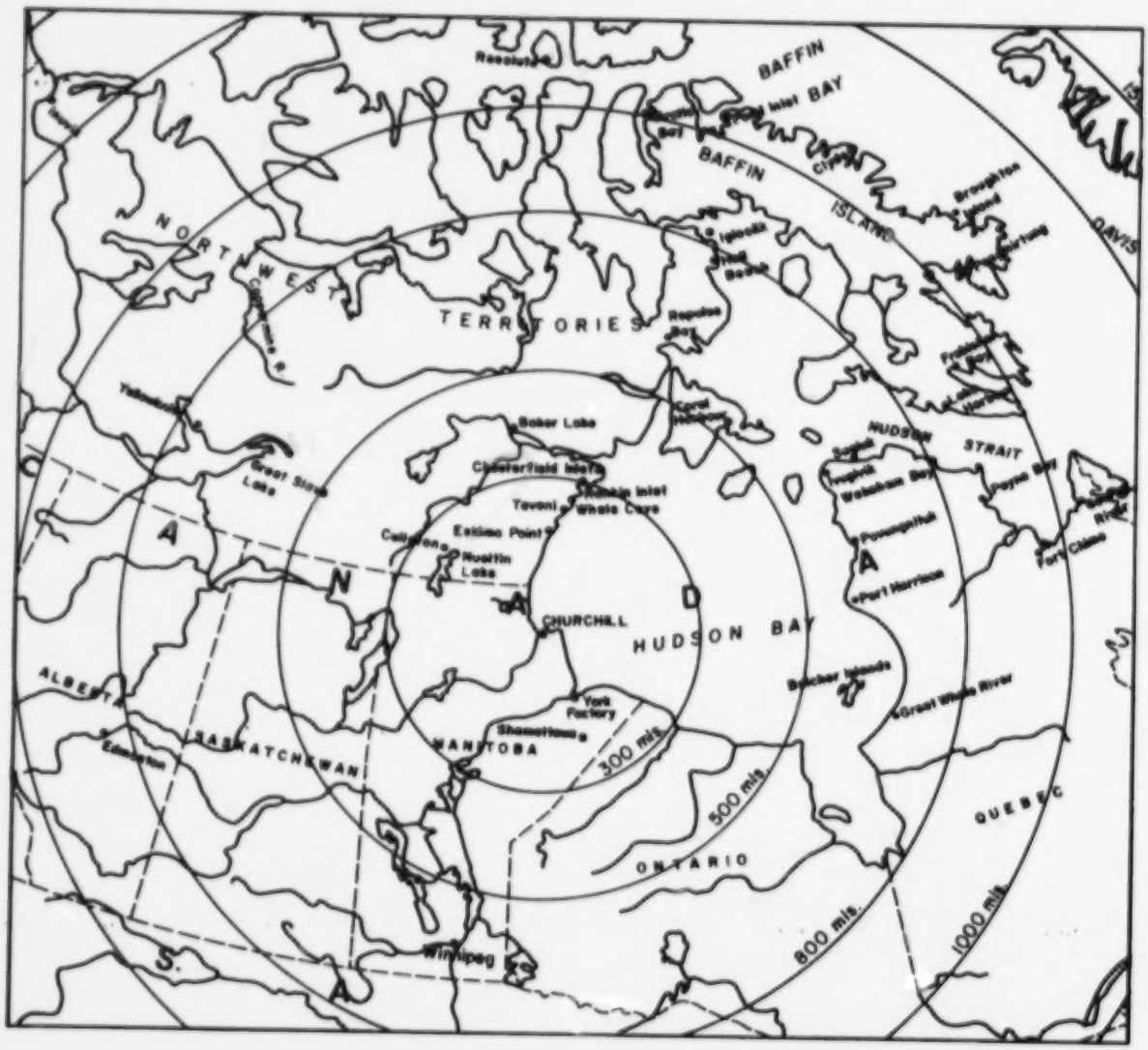
1984 Staff

Mr. Jack Simpson — Summer Manager
Mr. Joe Cloutier — Manager
Miss Cathy Jarvis
Dr. Vern McNeilus

Credits

All Photographs
Greg Goodwin

Sketches
Steve Jackson — Cover, 2, 4, 5
Linda Fairfield Stechesen — 13



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